

Title (en)
A SHORTED-EMITTER THYRISTOR DEVICE

Publication
EP 0035841 A3 19820526 (EN)

Application
EP 81300750 A 19810224

Priority
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Abstract (en)
[origin: EP0035841A2] In a thyristor device (1) the dynamic characteristics, e.g. critical dV/dt, of the thyristor may be improved by means of shorts (2) between the base layer (4) and the emitter metallisation layer (9). Such shorts, however, slow the rate of conduction spreading. To overcome this the series resistance (Rs) of the shorts (2) is made at least equal to the maximum effective lateral resistance (Ra) of the base layer between the shorts (2) by means of a layer (7) of resistive material provided between the upper surface of the columns (3) of the shorts (2) and the emitter metallisation layer (9). The resistive material may be silicon of the same type as the base layer (4) but possessing higher resistivity or a cermet film. In another form in the upper surface of the columns (3) of the shorts (2), in contact with metallisation layer (9), a moat (13) surrounding a central land (12) is etched to leave only a relatively small contact area.

IPC 1-7
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IPC 8 full level
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CPC (source: EP)
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Cited by
FR2516704A1; EP0171474A1; FR3011124A1; EP0298001A1; FR2617640A1; US4903105A; US6617661B2; US9070738B2; WO2004041541A1; WO9909597A1

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